

Warmup

Boards

Name the property that justifies the statement.

1. $(-8 + 8) + 15 = 0 + 15$

2. $5(8 - 6) = 5(8) - 5(6)$

3. $3 + 4 = 4 + 3$

4. $5 + x = 5 + x$

5. If $3 + x = 8$, and $8 = 2x - 2$, then $3 + x = 2x - 2$.

6. $(9 + 5) + 17 = 9 + (5 + 17)$

7. If $2 - x = 4$, then $4 = 2 - x$.

8. $9 \cdot \frac{1}{9} = 1$

9. If $3x + 8x = 55$, then $11x = 55$

10. If $3x + 8 = 32$, then $3x = 24$

Inverse
Distr.

Comm.
Ref.

Trans.

Assoc.
Symm.

Inverse

Subst.

Subtr

-8 -8

Sep 6-2:54 PM

36.

$$\begin{array}{r} 5 + b = 13 \\ -5 \\ \hline \end{array}$$

$$b = 8$$

Subtr.

Sep 11-12:52 PM

40.

$$y - 2 = -8$$

$$3(y - 2) = 3(-8)$$

Mult.

Sep 11-12:53 PM

38.

$$g - t = n$$

$$g = n + t$$

Sep 11-12:53 PM

Justify the steps

1. $5(x + 6) = 38 + 7$

2. $5x + 30 = 38 + 7$

3. $5x + 30 = 45$

4. $5x = 15$

5. $x = 3$

1. Given
2. Distributive
3. Substitution
4. Substr.
5. Division

Sep 6-2:58 PM

Justify the steps

1. $18 + 3x = 6(5x - 21)$

2. $6(5x - 21) = 18 + 3x$

3. $30x - 126 = 18 + 3x$

4. $27x = 144$

5. $x = 5 \frac{1}{3}$

1. Given
2. Symmetric
3. Distr.
4. Add/Subtr.
5. Div.

Sep 6-2:58 PM

1.3 Solving Equations

Change the verbal expression/sentence into an Algebraic expression/equation

1. Twice the sum of a number and 6

$$2(n + 6)$$

2. The square of a number increased by five times the number

$$x^2 + 5x$$

3. Four times the difference of a number and six

$$4(x - 6)$$

Sep 6-2:55 PM

4. The sum of fourteen and nine is twenty-three.

$$14 + 9 = 23$$

5. Six is equal to negative five plus a number.

$$6 = -5 + n$$

6. Two less than seven times a number is nineteen.

$$7x - 2 = 19$$

7. A number divided by three is equal to four times the number.

$$\frac{n}{3} = 4n$$

Sep 6-2:56 PM

Solve for the indicated variable.

$$F = \frac{mv^2}{r} \quad \text{for } m$$

1-3 Solving Equations

$$\frac{Fr}{v^2} = \frac{mv^2}{v^2}$$

$$m = \frac{Fr}{v^2}$$

Sep 6-2:57 PM

$$A = P(1 + rt) \quad \text{for } t$$

$$\frac{A}{P} = 1 + rt$$

$$\frac{A}{P} - 1 = rt$$

$$\frac{\frac{A}{P} - 1}{r} = t$$

Sep 6-2:57 PM

$$\left(\frac{1}{p} + \frac{1}{q} = \frac{1}{f} \right)^{pqf} \text{ for } f$$

$$qf + pf = pq$$

$$f(q+p) = pq$$

$$f = \frac{pq}{q+p}$$

Sep 6-2:57 PM

$$\frac{S}{1} = \frac{rl - a}{r - 1} \text{ for } r$$

$$S(r-1) = rl - a$$

$$Sr - S = rl - a$$

$$Sr - rl = S - a$$

$$r(S-l) = S-a$$

$$r = \frac{S-a}{S-l}$$

Sep 6-2:58 PM

$$I = \frac{nE}{nr + R} \quad \text{for } n$$

$$n = \frac{-IR}{Ir - E} = \frac{IR}{E - Ir}$$

Sep 6-2:58 PM

HW

p24-25

#s 19-27 odd, 41-61 odd, 62

QUIZ
Thursday

Aug 25-10:28 AM